

# Thumbtip Reach

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## Purpose

This measurement is important in the design and layout of work stations occupied or used by Navy personnel. Thumbtip reach is particularly useful for the placement of controls in various locations within cockpits.

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## Equipment Required

Wall--mounted linear scale.

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## Measurement Procedure

1. The subject stands erect in a corner looking straight ahead with the feet together and heels 7.87 inches (20 cm) from the back wall.
2. With the buttocks and shoulder placed against the wall, the right arm and hand (palm down) are stretched horizontally along the scale while the thumb continues along the horizontal line of the arm with the index finger curving around to touch the pad at end of the thumb.
3. The subject's right shoulder is held against the rear wall. The horizontal distance from the back wall to the tip of the right thumb is measured.



**NOTE 1:** Measurements are to be taken to the nearest eighth of an inch. Measurements should be taken at least twice. If there is a large variation between the two measurements, recheck body position and repeat measurements.